



PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Lieven De Veylder *et al.* **Examiner:** Cynthia Collins

Serial Number: 09/574,735 **Art Unit:** 1638

Filed: May 18, 2000 **Docket:** 1187-2 CIP

For: CYCLIN-DEPENDENT **Dated:** November 17, 2003
KINASE INHIBITORS
AND USES THEREOF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION PURSUANT TO 37 C.F.R. §1.132

Sir,

I, Wim J. F. Van Camp declare as follows

1. I am a Belgian citizen residing at 14 Witbakkerstraat, B-9051 Sint-Denijs-Westrem, Belgium.
2. I graduated from Rijksuniversiteit Gent with a First Class Degree in Zoology in 1988 and from Rijksuniversiteit Gent with a Doctor of Philosophy in 1994. From 1994 to 1998 I held the position of Group Leader in the Laboratory of Genetics of Prof. Dr. Marc Van Montagu. Since 1998, I have been working for CropDesign N.V. in various positions and currently as Director, Technology Management. I am first author or co-author of a number of scientific publications.

3. I am a co- inventor of the subject matter in the above-identified application, (hereinafter referred to as the “APPLICATION”) and I am familiar with the contents therein. I have read the Official Action of the United States Patent and Trademark Office dated 17 September 2003.

4. The invention of the present APPLICATION is directed to a method for decreasing or increasing cyclin dependent kinase activity in a plant and to the various phenotypic changes which occur in a plant upon doing so.

5. Exhibit 1 is a photograph showing the top view of *Arabidopsis* plantlets transformed with p35ScaMV::CKI6. CKI6 is referenced on page 10 and Figure 12 of the specification of the above-identified application as ICK6 (ICN2). All plants were sown at the same time, with transgenic and control plants grown in an alternating fashion, with control plants starting at the bottom left. Evaluation of *Arabidopsis* plants transformed with p35ScaMV::CKI6 revealed that these CKI6-containing plants gave stunted plantlets with a serrated leaf phenotype.

6. Exhibit 2 is a side view of *Arabidopsis* plantlets transformed with p35ScaMV::CKI6. All plants were sown at the same time. The control plant is second from the left (with a minus sign on the pot); the three others plantlets are the transgenic plants transformed with p35ScaMV::CKI6. The stunted plant phenotype is clearly visible in the photograph presented as Exhibit 2.

7. The serrated leaf phenotype is clearly visible in the photograph provided as Exhibit 3 which is a close-up of an *Arabidopsis* transgenic plant transformed with p35ScaMV::CKI6.

8. Exhibit 4 is a photograph showing the top view of *Arabidopsis* plantlets transformed with p35ScaMV::CKI7. CKI7 is referenced on page 10 and Figure 12 in the specification of the above-identified application as ICK7 (ICN6). All plants were sown at the same time, with transgenic and control plants grown in an alternating fashion, with control plants starting at the bottom left. Evaluation of *Arabidopsis* plants transformed with p35ScaMV::CKI7 revealed that these CKI7-containing plants gave stunted plantlets with a serrated leaf phenotype.

9. The stunted plant phenotype is clearly visible in the photograph provided as Exhibit 5 which is a close-up of the top view of *Arabidopsis* plantlets transformed with p35ScaMV::CKI7. The control plant is in the middle flanked by the two transgenic plants transformed with p35ScaMV::CKI7.

10. Exhibit 6 is a top view of a transgenic *Arabidopsis* plant transformed with p35ScaMV::CKI7, in which the leaf serration phenotype is clearly visible.

11. Exhibit 7 is a photograph of leaf epidermal cells from transgenic plant tissue (top) versus leaf epidermal cells from wild type plant tissue (bottom), at the same magnification. The cell size in leaf epidermal tissue was examined in both wild type and in transgenic *Arabidopsis* plants transformed with p35ScaMV::CKI6. The cell size in transgenic plant tissue was clearly much larger than the cells from wild type plant tissue.

12. Similar results i.e., a stunted growth phenotype and a serrated leaf phenotype, were also observed in plants transformed with the following constructs: p35ScaMV::CKI3 and pUBI::CKI4. CKI 3 and CKI4 are referenced on page 10 and Figure 12 in the specification of the above-identified application as ICK3 (FL66) and ICK4 (FL67), respectively.

13. The preceding paragraphs and attached exhibits demonstrate that one skilled in the art, having the present application in hand as well as the literature extant as of the effective filing date of THE APPLICATION, could practice the invention without having to engage in undue experimentation.

14. I declare that all statements made herein of my knowledge are true and that all statements are made on information and belief are believed to be true; and further that these statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such false statements may jeopardize the validity of the APPLICATION or any patent issuing thereon.

Dated: Nov. 17, 2003

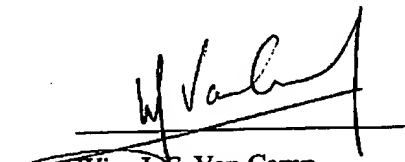

Wim J. F. Van Camp

Exhibit 1

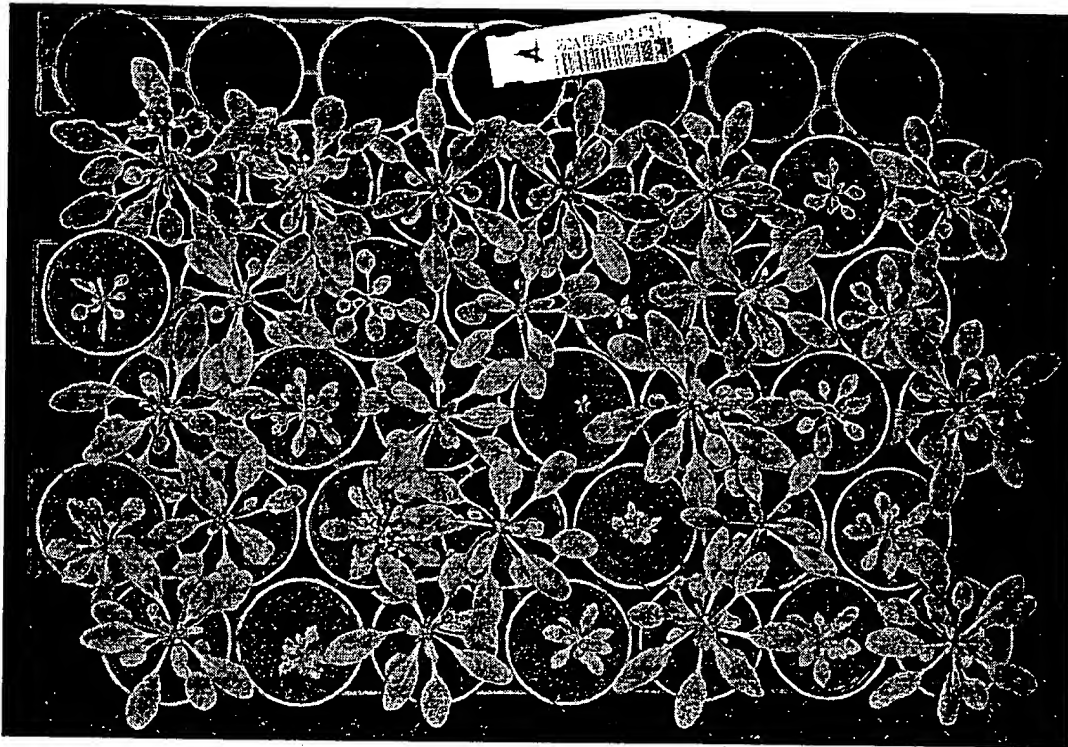


Exhibit 2



Exhibit 3



Exhibit 4

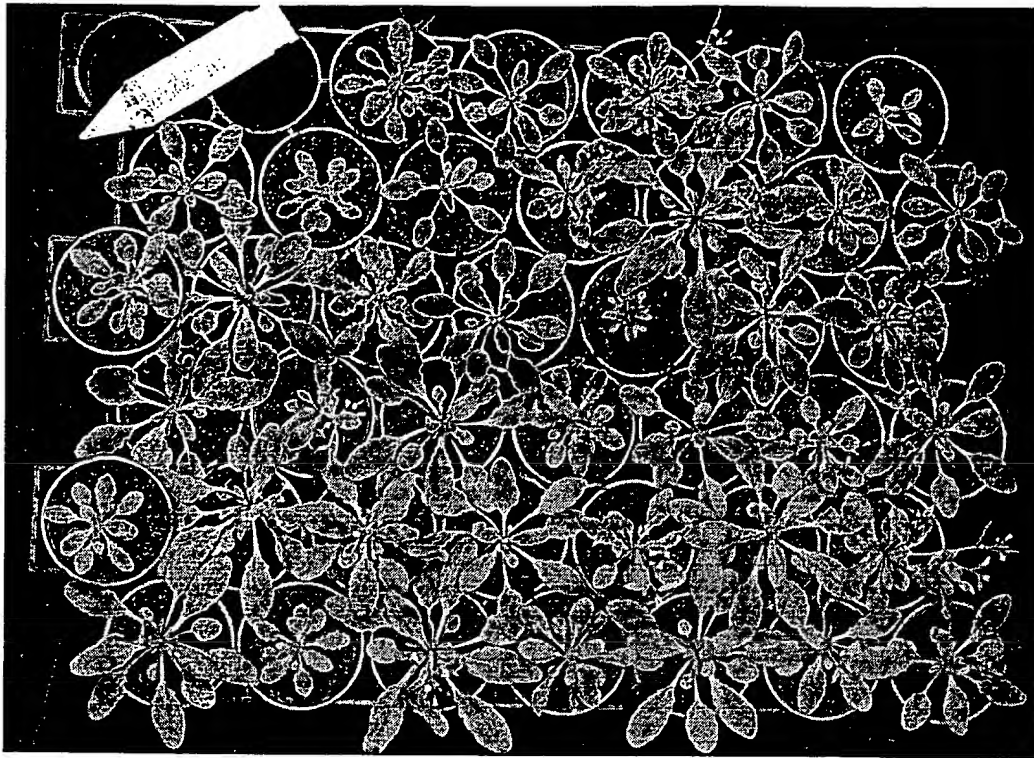


Exhibit 5

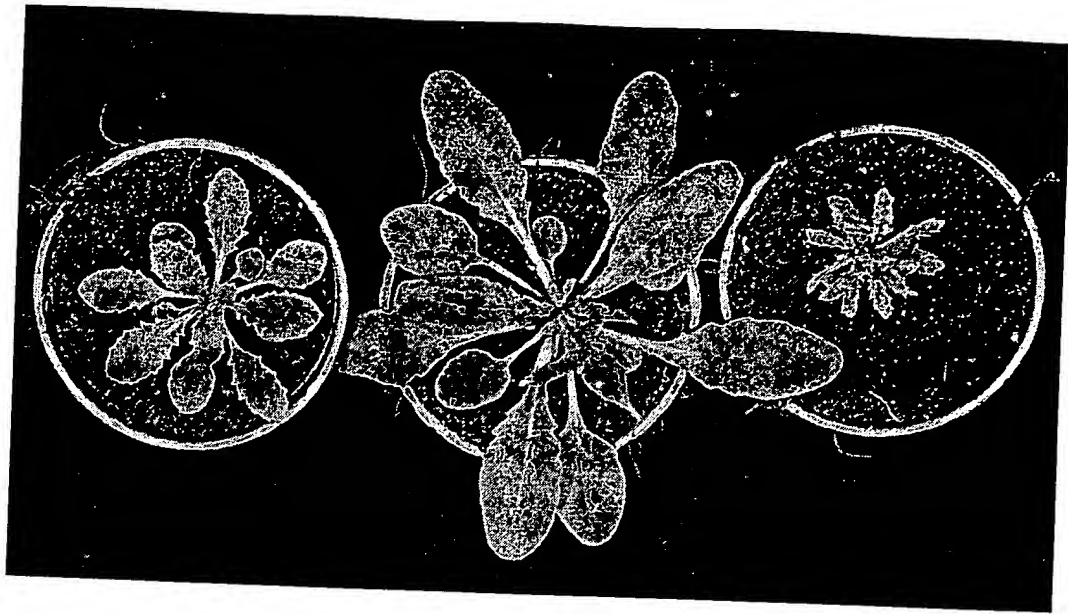


Exhibit 6

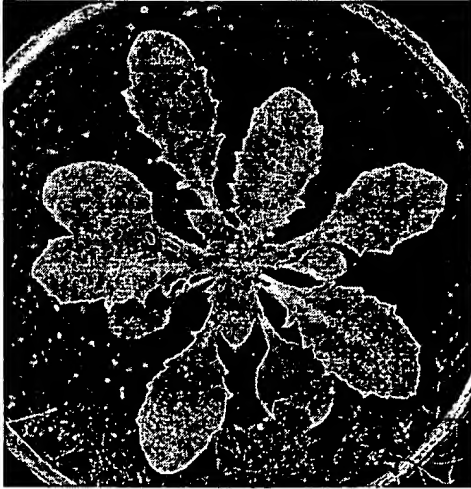


Exhibit 7

